

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 17
2. AMENDMENT/MODIFICATION NO. 9	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY John F. Kennedy Space Center, NASA Procurement Office – ODIN – OP-OS-ODIN Kennedy Space Center, FL 32899		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code) OAO Corporation 7375 Executive Place Seabrook, MD 20706-2278		(x) 9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-98144/NNK05OA12D 10B. DATED (SEE ITEM 13) December 1, 2004	
CODE	FACILITY CODE		
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS [] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [] is extended, [] is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning ____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.			
12. ACCOUNTING AND APPROPRIATION DATA (If required)			

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: NAS5-98144 Contract Clause C.7 Technology Refreshment Process and FAR Clause 52.212-4 Contract Terms and Conditions-Commercial Items, (c) Changes
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor [] is not, [**X**] is required to sign this document and return **1** copies to the issuing office.

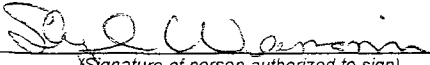
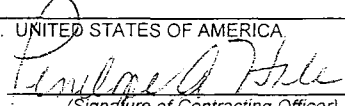
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Stennis Space Center --- ODIN SERVICES

Technology Infrastructures: Incorporation of 17 Infrastructure Upgrades Previously Approved Utilizing Fast Track Process

Change in Delivery Order Price: \$125,728.42 (INCREASE)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Sheryl K. Weimann Contracts Manager		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Penelope A. Hale Contracting Officer	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED 3/29/05	16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	16C. DATE SIGNED 4/11/2005

1. In accordance with Master Contract NAS5-98144, C.7, Technology Refreshment Process, the technology refreshment services referenced below is hereby incorporated into this Delivery Order at a fixed price of \$125,728.42.

Fast Track Approval Date	SWR/Subject	Amount
March 11, 2005	DB00 0510 00 Repair (2) fiber cables at FAA trailer located behind B3203 for NDBC	\$ 631.60
February 9, 2005	HE00 FF01 00 Install and relocate Cat6 wiring in rooms 145A and 145B in B2101 for USGS	\$ 3,067.26
December 15, 2004	J1R3 7098 01 Relocate (4) 24MM/12SM fiber cables in B4110, from bay 929 and bay 930 in room 101 to room 102B and place in existing bay 1009 for Boeing/Rocketdyne	\$ 14,581.26
February 8, 2005	J1R3 7098 02 Rev 01 Install multimode fiber in B4110 to support cutover of fiber from one cabinet to another cabinet for Boeing/Rocketdyne,	\$ 3,829.23
March 10, 2005	NESC 5TMP 02 Install (1) 4-strand singlemode fiber cable from room 241 to room 263 in B1100 to support Tandberg Video Display in room 263	\$ 1,561.29
February 9, 2005	NJ10 L5AE 00 Install and relocate Cat5e wire and multimode duplex fiber in B1002, rooms 279, 291, 291A and 291G due to placement of modular furniture for NAVOCEANO	\$ 10,931.84
January 28, 2005	NJ00 L5AH 00 Install 6-strand singlemode fiber cable from room 159A to room 194H in B1100 to support networks for NAVOCEANO	\$ 2,004.63
February 11, 2005	NJ00 L5AJ 00 Install Cat5e wiring, multimode and singlemode fiber in B1000, B1002 and B1003 for NAVOCEANO	\$ 24,562.04

Fast Track Approval Date	SWR/Subject	Amount
March 10, 2005	NJ00 L5AK 00 Install Cat5e wiring in rooms 169, 210, 221 and 235B in B1002, rooms 75, 110, and 9 in B1003, rooms 105 and 127 in B1205 and rooms 102, 102D, 105A, 308A, 212, 122, and 133A in B8100 for NAVOCEANO	\$ 5,406.97
January 28, 2005	NM00 5R40 00 Install (1) Classified Cat5e wires to (10) locations on 3rd floor of B1100 South for CNMOC to support NMCI network	\$ 3,241.77
January 19, 2005	P203 5231 05 One System Admin personnel attendance at 2005 PatchLink conference and meeting (January 31, 2005 - February 4, 2005) at Scottsdale, AZ	\$ 2,187.89
March 10, 2005	P203 5226 02 Migrate current NT4.0 domain structure to Windows 2003 Active Directory which includes building at least three SSCMAIN domain controllers and collapsing existing resource domains into organizational units. Additionally the contractor shall migrate Exchange 5.5 to Exchange 2003 and build two external DNS Bind Servers	\$ 28,653.42
January 19, 2005	P203 5GEN 00 Procure annual support and maintenance for Ctech Logger and EZSave through November 30, 2007	\$ 4,315.97
February 3, 2005	P203 5PBX 00 Assist vendor in removal, installation and implementation of PointSpan DVD server upgrade and software in B1201.	\$ 3,345.94
January 28, 2005	P203 5SPM 00 Assist Proofpoint vendor in the installation of Proofpoint appliance into rack in room 106 of B1201	\$ 8,285.46
January 28, 2005	WM00 5FAA 00 Install (2) 24-strand multimode fiber cables from A143 to room C156 in B1009 for NRLDET to support computer network	\$ 8,695.30
February 7, 2005	XK49 5190 00 Removal of two spans of aerial copper cable behind B2104 and B2105 to enable crane use for the installation of a new cooling tower	\$ 426.55

2. SWR DB0 0510 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to repair (2) fiber cables at FAA trailer located behind B3203 for NDBC as outlined in OAO proposal dated March 1, 2005.

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Test existing fiber that was pulled out of the trailer that was removed and fiber was pulled into box on the side of tower that is holding GPS and computer to see where the break is located.
 - (2) After removing defective section of fiber terminate fiber into singlemode ST connectors inside of box next to tower and place in a fiber insert and place in a Panduit outlet box to protect it.
 - (3) Test and label fiber at box next to tower up to room 308 in B3203.
 - (4) Test fiber that was pulled out of existing FAA trailer by technician to connect to a temporary fiber that was run to GPS and was broken by technician relocating fiber.
 - (5) Terminate existing fiber in item (4) above into singlemode ST connectors and place back in existing faceplate in the FAA trailer to be used at a later date.
- b. The contractor shall provide the following material:
 - (1) 4 each P3020A-C-125 singlemode ST connectors (157475)
 - (2) 4 each C3000A-2 singlemode ST couplers (105263)
 - (3) 2 each Ortronics blank modules (148027)
 - (4) 1 each Panduit outlet box (201336)
 - (5) 1 each Ortronics faceplate (148025)
 - (6) 1 each Ortronics fiber duplex insert (162979)
 - (7) 1 each 1-meter singlemode ST/ST fiber jumper (1519866)
- c. Schedule: The completion of this effort shall be 1 week after receipt of Fast Track approval (March 11, 2005).

3. SWR HE00 FF01 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install and relocate Cat6 wiring in rooms 145A and 145B in B2101 for USGS as outlined in OAO proposal dated January 26, 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Relocate (1) existing 4-port network jack location in room 145A from the east wall to the south wall.
 - (2) Install (4) new Siemon Cat6 plenum wires to (2) network jack locations in room 145A. Install one on the north wall and one on the west wall. Terminate and place in GFE singlegang faceplate.
 - (3) Relocate (1) existing 4-port network jack location in room 145B from the ceiling to the south wall.

- (4) Install (4) new Siemon Cat6 plenum wires to (2) network jack locations in room 145B. Install one on the east wall and one on the north wall. Terminate and place in GFE singlegang faceplate.
- (5) All wiring will go back to room 139 and terminate on existing Cat6 patch panel.
- (7) Test and label all jacks.
- (8) Install Panduit raceway from drop ceilings down to GFE Siemon outlet boxes since walls are concrete block and can't be fished.
- (9) Provide OAO with redline drawing showing relocation of jacks and installation of new jacks and jack numbers.

b. The contractor shall provide the following material:

- (1) 2,500 feet of Siemon Cat6 plenum wire (CMP-00424SIE-7RB-01)
- (2) 8 each Siemon Cat6 dual port 568A/B jacks (CT-C6-C6-20-D)
- (3) 4 each Panduit LD5 raceway (131156)
- (4) 4 each Panduit drop ceiling fitting (131144)

c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (February 9, 2005).

4. SWR J1R3 7098 01

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to relocate (4) 24MM/12SM fiber cables in B4110, from bay 929 and bay 930 in room 101 to room 102B and place in existing bay 1009 for Boeing/Rocketdyne as outlined in OAO proposal dated November 2, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

a. The contractor shall be responsible for performance of the following tasks:

BOE-TEL will work:

- (1) Install (4) 24mm/12sm fiber cables from communications area in room B101 up to room 102B.
- (2) Relocate existing LGX panels from Bay 929 and Bay 930 in room 101 to Bay 1009 in room 102B once BOE-TEL has removed the fiber cables.
- (3) Make fusion splice in the B101 with the (1) existing cable from B4120 and B4122 and (2) cables from B4995, to the (4) new cables that were installed in item (1) above and place in fiber splice case.
- (4) Terminate fiber into ST connectors and place in LGX panels that were relocated in item (2) above.
- (5) Test and label fiber.
- (6) Provide OAO with redline drawing showing route take with new cable.
- (7) Provide OAO with fiber shots.
- (8) Install GFE LGX panels and associated ST couplers and 1000ST panels.

b. The contractor shall provide the following material:

- (1) 800 feet Corning 24MM/12SM F.O.Cable (372-COR62-HYB-24/12)
- (2) 144 EACH Cool Cure Consumables (142172)
- (3) 144 each Heat shrink sleeves (161239)
- (4) 96 each P2020C-C-125 multimode ST connectors (170290)
- (5) 48 each P3020A-C-125 singlemode ST connectors (157475)
- (6) 8 each 3M splice case trays (147657)

- (7) 2 3M 2178 series fiber splice case (203826)
- (8) 1 pack Premier black tie wraps

c. Schedule: The completion of this effort shall be 12 weeks after receipt of Fast Track approval (December 15, 2004).

5. SWR J1R3 7098 02 Rev 01

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install multimode fiber in B4110 to support cutover of fiber from one cabinet to another cabinet for Boeing/Rocketdyne, as outlined in OAO proposal dated January 13, 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

a. The contractor shall be responsible for performance of the following tasks:

BOE-EL will work:

- (1) Install (1) 6-strand multimode fiber cable into ½ inch flex conduit from room B101 up to room 101 to cabinet A2TCC. Terminate fiber into ST connectors and place the end in room B101 in LIU that feeds from B4995. Attach a ST coupler on the end of each fiber in cabinet A2TCC for the Boeing technician to connect to existing fiber in cabinet when he does cutover. Install 2-strand multimode fiber cable from B101 to cabinet A2TCC.
- (2) Install (1) 4-strand multimode fiber cable into 3/8" inch flex conduit from room B101 up to room 101 to cabinet Bay 929/930. Terminate fiber into ST connectors and place the end in room B101 in LIU that feeds from B4995. Attach a ST coupler on the end of each fiber in cabinet 929/930 for the Boeing technician to connect to existing fiber in cabinet when he does cutover.
- (3) Install (1) 2-strand multimode fiber cable into 3/8" flex conduit from room B101 up to room 101 to cabinet A1TCC. Terminate fiber into ST connectors and place the end in room B101 in LIU that feeds from B4995. Attach a ST coupler on the end of each fiber in cabinet A1TCC for the Boeing technician to connect to existing fiber in cabinet when he does cutover.
- (4) Test and label at each end of the fiber cables.

OAO will work:

- (1) OAO technicians will place fiber jumpers in B4995 to activate circuits to B4120 and B4122. OAO technicians will remove fiber jumpers after cutover of existing fiber has been completed.

b. The contractor shall provide the following material:

- (1) 260 feet of Corning 2-strand multimode MIC plenum cable (370-949-FDDI-2)
- (2) 130 feet of Corning 4-strand multimode MIC plenum cable (370-949-FDDI-4)
- (3) 100 feet of Corning 6-strand multimode MIC plenum cable (370-949-FDDI-6)
- (4) 100 feet of ½" inch flex conduit
- (5) 70 feet of 3/8" inch flex conduit
- (6) 28 each cool cure consumables (142172)
- (7) 28 each P2020C-C-125 multimode ST connectors (170290)
- (8) 28 each C2000A-2 multimode ST couplers (088987)
- (9) 14 each 2-meter duplex multimode ST/ST (139055)
- (10) 6 each 1-meter duplex multimode ST/ST (129350)

- c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (February 8, 2005).

6. SWR NESC 5TMP 02

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install (1) 4-strand singlemode fiber cable from room 241 to room 263 in B1100 to support Tandberg Video Display in room 263 as outlined in OAO proposal dated February 10, 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:
- (1) Install (1) 4-strand singlemode fiber cable from room 241 to room 263.
 - (2) Install (1) Panduit deep outlet box in room 241.
 - (3) Install (1) singlegang faceplate equipped with a 4-ST fiber insert.
 - (4) Install (1) Caddy clip in room 263 to hold faceplate.
 - (5) Install (1) singlegang faceplate equipped with a 4-ST fiber insert.
 - (6) Terminate both ends of fiber into ST connectors and place into fiber inserts.
 - (7) Test and label fiber at both ends.
 - (8) Provide a redline drawing to OAO so that building drawing can be updated.
- b. The contractor shall provide the following material:
- (1) 375 feet of Corning MIC plenum 4-strand fiber cable (370-948-SMODE-04)
 - (2) 8 each cool cure consumables (142172)
 - (3) 8 each P3020A-C-125 singlemode ST connectors (157475)
 - (4) 8 each C3000A-2 singlemode ST couplers (105263)
 - (5) 2 each Ortronics singlegang faceplate (148025)
 - (6) 2 each Ortronics 4-fiber ST jack insert (173628)
 - (7) 1 each Panduit deep outlet box (201336)
 - (8) 1 each 4 feet singlemode ST/ST fiber jumper (FSMD-2222-4)
 - (9) 1 each 50 feet singlemode ST/SC fiber jumper (FSMR-2277-50)
 - (10) 1 each 2-meter singlemode ST/ST fiber jumper (151987)
 - (11) 1 each 2-meter singlemode ST/SC fiber jumper (152037)
 - (12) 1 each Caddy clip

- c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (March 10, 2005).

7. SWR NJ10 L5AE 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install and relocate Cat5e wire and multimode duplex fiber in B1002, rooms 279, 291, 291A and 291G due to placement of modular furniture for NAVOCEANO as outlined in OAO proposal dated January 27, 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:

Room 291G

- (1) Install a multimode duplex fiber cable to (3) jack locations in room 291G for classified Gig.
- (2) Install (1) Cat5e wire to (2) jack locations in room 291G for classified.
- (3) Relocate (1) existing classified duplex fiber jack from one side of room to the other in room 291G.
- (4) Relocate (1) multimode classified duplex fiber jack from room 279 power pole into room 291G.

Room 279A

- (5) Install a Cat5e wire to (2) jack locations. One will be used for classified and one for unclass.

Room 279

- (6) Install (1) Cat5e wire to each of these locations: Marc Beddoe, new hire & Mike Metzger office.
- (7) Relocate (1) classified Cat5e jack from power pole into Giovanni Morris office.
- (8) Relocate (1) classified Gig multimode duplex fiber from power pole into Giovanni Morris office.
- (9) Relocate (1) unclassified Gig multimode duplex fiber from Chuck Nichols cubicle to Mike Metzger's cubicle.
- (10) Relocate (1) Cat5e unclass jack from Giovanni Morris's cubicle to Bob King's cubicle.
- (11) Relocate (1) Cat5e unclass jack hanging from ceiling down into Giovanni Morris cubicle.
- (12) Relocate (1) classified Gig multimode duplex fiber from Giovanni Morris's cubicle to Bob King's cubicle if it is long enough.
- (13) Relocate (1) classified Gig multimode duplex fiber from power pole and put in Jim Strahan's cubicle.
- (14) Relocate (1) classified Cat5e jack from power pole and put in Jim Strahan's cubicle.

Room 291A

- (15) Install (5) classified Gig multimode duplex fiber in the following cubicles: New hire, Wesley Lewis, Printer area, Shadar & Windows seat.
- (16) Relocate (7) classified Gig multimode duplex fiber in the following cubicles: Shadar, printer area, Dave Sanders, Paul Marin, Gail Smith, Kelly Fougeroussi, & Wesley Lewis.
- (17) Relocate (1) HYSAS multimode duplex fiber from ceiling to printer area.
- (18) Relocate (1) unclass NMCI from ceiling over Melissa Odom to Wesley Lewis cubicle.
- (19) Install (4) unclass NMCI Cat5e wires to the following cubicles: Wesley Lewis, Bill Byars, Gail Smith, & New Hire.
- (20) Relocate (2) class Cat5e wires from ceiling into printer cubicle.
- (21) Relocate (1) class Cat5e wire from power pole in Dave Sanders cubicle down to cubicle.
- (22) Install (1) Cat5e wire to (1) unclass and (1) class jack location in Ray Sawyer's office.

b. The contractor shall provide the following material:

- (1) 4,000 feet of Corning MIC duplex fiber cable (370-949-FDDI-02)
- (2) 2,000 feet of Belden Data Twist Five (CMP-00424BEL-5U-06) Blue
- (3) 1,500 feet of Belden Data Twist Five (CM-00424BEL-5U-03) Red
- (4) 42 each Ortronics blank modules (148027)
- (5) 36 each cool consumables (142172)
- (6) 36 each P2020C-C-125 multimode ST connectors (118974)

- (7) 28 each Panduit LD10 raceway (131155)
- (8) 22 each Ortronics singlegang faceplates (148025)
- (9) 22 each Panduit LD5 (131156)
- (10) 22 each Panduit outlet boxes (201336)
- (11) 13 each Ortronics single T568A/B Cat5e jack (248941)
- (12) 9 each Ortronics fiber duplex insert (162979)
- (13) 2 packs of Panduit inside corners LD10 (131130)
- (14) 2 packs of Panduit outside corners LD10 (131128)
- (15) 2 packs of Panduit end caps LD10 (131132)
- (16) 2 packs of Panduit right angles LD10 (131126)
- (17) 2 packs of Panduit reducer fitting (142142)
- (18) 2 packs of Panduit TEES LD5 (142138)
- (19) 2 packs of Panduit inside corners LD5 (131142)
- (20) 2 packs of Panduit outside corners LD5 (131137)
- (21) 2 packs of Panduit right angels LD5 (131138)

- c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (February 9, 2005).

8. SWR NJ00 L5AH 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install 6-strand singlemode fiber cable from room 159A to room 194H in B1100 to support networks for NAVOCEANO as outlined in OAO proposal dated January 10, 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Install (1) 6-strand plenum singlemode fiber cable from room 159A to room 194H.
 - (2) Terminate both ends of the fiber into ST connectors.
 - (3) Install (2) LIU 100A fiber boxes in room 159A and place the fiber on 10A panels box.
 - (4) Place the other end of fiber into existing LGX panel in room 194H.
 - (5) Test and label fiber at both ends.
 - (6) Provide OAO with redline drawing showing route taken with fiber and the cable name.
- b. The contractor shall provide the following material:
 - (1) 550 feet of Corning 6-strand plenum fiber cable (370-948-SMODE-06)
 - (2) 12 each cool consumables (142172)
 - (3) 12 each P3020A-C-125 singlemode ST connectors (157475)
 - (4) 12 each C3000A-2 singlemode ST couplers (105263)
 - (5) 2 each Avaya 100A LIU (146050)
 - (6) 2 each Avaya 10A panels (088980)
- c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (January 28, 2005).

9. SWR NJ00 L5AJ 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install Cat5e wiring, multimode and singlemode fiber in B1000, B1002 and B1003 for NAVOCEANO as outlined in OAO proposal dated January 25 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

a. The contractor shall be responsible for performance of the following tasks:

- (1) Install (2) Cat5 unclass drops to (2) cubicles in room 122 area back to room 105 in B1000.
- (2) Install (2) Cat5 unclass drops to (3) offices 107A, 107B & 122C back to room 105 in B1000.
- (3) Install (2) Cat5 unclass drops to (5) locations in room 303 area and (2) Cat5 drops to (1) location in room 308 area down to room 211A in B1000.
- (4) Install (2) Cat5 unclass drops to (27) locations on the first floor south back to room 128 in B1002.
- (5) Install (2) Cat5 classified drops to (7) locations in room 32 & 32A back to room 160 in B1003 instead of fiber. (This will eliminate existing network switch)
- (6) Install (1) GFE 6-strand classified multimode fiber cable from room 108 to room 129 in B1003.
- (7) Install (1) GFE 6-strand unclassified multimode fiber cable from room 108 to room 140 in B1003.
- (8) Install (1) GFE 12-strand unclassified multimode fiber cable from room 110 up to room 211A B1000.
- (9) Install (1) GFE 6-strand classified multimode fiber cable from room 110 up to room 211B in B1000.
- (10) Install (2) 100A LIU's in room 129 of B1003 and place GFE 6-strand multimode fiber cable in LIU.
- (11) Install (2) 100A LIU's in room 140 of B1003 and place GFE 6-strand multimode fiber cable in LIU.
- (12) Install (1) LST1U-72/7 termination shelf in room 110 of B1000 and place one end of GFE 12-strand singlemode fiber cable in termination shelf and the other end in existing LGX panel in room 211A to be used for unclass.
- (13) Install (1) LST1U-72/7 termination shelf in room 110 of B1000 and place one end of GFE 6-strand singlemode fiber cable in termination shelf and the other end in existing LGX panel in room 211B to be used for class.
- (14) Terminate all fiber into ST connectors.
- (15) Install dual Cat5e jacks at all locations and terminate Cat5 wiring.
- (16) Install Caddy J-hooks above ceiling to hold Cat5e wiring and fiber cables.
- (17) Install Panduit outlet boxes and Caddy clips where necessary to accept singlegang faceplates and jacks.
- (18) Install Panduit raceway for the classified Cat5e drops from rooms 32 and 32A back to room 160 and the classified fiber run from room 108 to room 29 in the library in B1003.
- (19) Test and label Cat5e wiring.
- (20) Test and label fiber.

b. The contractor shall provide the following material:

- (1) 14,000 feet of Belden Data Twist Five plenum wire blue (CMP-00424BEL-5U-06)
- (2) 5,000 feet of Belden Data Twist Five PVC wire red (CM-00424BEL-5U-03)

- (3) 60 each Ortronics blanks (148027)
- (4) 60 each cool cure consumables (142172)
- (5) 45 each Ortronics dual 568A/B Cat5e jacks (248945)
- (6) 40 each Caddy J-hooks (184873)
- (7) 38 each Caddy clips (157703)
- (8) 36 each P3020A-C-125 singlemode ST connectors (157475)
- (9) 36 each C3000A-2 singlemode ST couplers (105263)
- (10) 36 each Ortronics singlegang faceplates (148025)
- (11) 30 each Panduit LD10 raceway (131155)
- (12) 30 feet Panduit TG70 raceway base & cover (230476) 8ft/lengths
- (13) 24 each P2020C-C-125 multimode ST connectors (170290)
- (14) 24 each C200A-2 multimode ST couplers (088987)
- (15) 10 each Panduit LD5 raceway (131156)
- (16) 10 packs of TG70 wire retainers (250004)
- (17) 7 each Panduit outlet boxes (201336)
- (18) 4 each Avaya 100A LIU (146050)
- (19) 4 each Avaya 10A panels (088980)
- (20) 4 each 3-meter singlemode ST/ST fiber jumper (151988)
- (21) 4 each 5-meter singlemode ST/ST fiber jumper
- (22) 2 each Panduit TG70 out side corner (249996)
- (23) 2 each LST1U-72/7 termination shelf (106722)
- (24) 2 packs of 1000ST fiber panels LST1U-72/7 (106730)
- (25) 1 pack of Panduit inside corners LD10 (131130)
- (26) 1 pack of Panduit outside corners LD10 (131128)
- (27) 1 pack of Panduit end caps LD10 (131132)
- (28) 1 pack of Panduit right angles LD10 (131126)
- (29) 1 pack of Panduit reducer fitting (142142)
- (30) 1 each Panduit TG70 inside corner (230478)
- (31) 1 each Panduit TG70 end cap (230485)

- c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (February 11, 2005).

10. SWR NJ00 L5AK 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install Cat5e wiring in rooms 169, 210, 221 and 235B in B1002, rooms 75, 110, and 9 in B1003, rooms 105 and 127 in B1205 and rooms 102, 102D, 105A, 308A, 212, 122, and 133A in B8100 for NAVOCEANO as outlined in OAO proposal dated February 15, 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:

B1002

- (1) Install (1) Cat5e wire to (2) locations in room 169 back to room 178 in B1002.
- (2) Install (1) Cat5e wire to room 210 back to room 216 of B1002.
- (3) Install (1) Cat5e wire to room 221 back to room 216 of B1002.
- (4) Install (1) Cat5e wire to room 235B back to room 216 of B1002.

B1003

- (5) Install (1) Cat5e wire to room 75 back to room 108 in B1003.
- (6) Install (1) Cat5e wire to (2) locations in room 110 back to room 108 in B1003.
- (7) Install (1) Cat5e wire to room 9 back to room 30A in B1003.

B1205

- (8) Install (1) Cat5e wire to room 105 back to room 109A in B1205.
- (9) Install (1) Cat5e wire to room 127 back to room 109A in B1205.

B8100

- (10) Install (1) Cat5e wire to (2) locations in room 102 back to room 101B in B8100.
- (11) Install (1) Cat5e wire to room 102D back to room 101B in B8100.
- (12) Install (1) Cat5e wire to room 105A back to room 101B in B8100.
- (13) Install (1) Cat5e wire to (3) locations room 308A back to room 305 in B8100.
- (14) Install (1) Cat5e wire to room 212 back to room 202 in B8100.
- (15) Install (1) Cat5e wire to room 122 back to room 101B in B8100.
- (16) Install (1) Cat5e wire to room 133A back to room 101B in B8100.

b. The contractor shall provide the following material:

- (1) 5,000 feet of Belden Data Twist Fiber (CMP-00424BEL-5U-06) blue
- (2) 42 each Ortronics blanks (148027)
- (3) 40 each Caddy J-hooks (184873)
- (4) 21 each Ortronics singlegang faceplate (148025)
- (5) 21 each Ortronics single T568A/B Cat5e jacks (248941)
- (6) 21 each Caddy clips (157703)

c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (March 10, 2005).

11. SWR NM00 5R40 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install (1) Classified Cat5e wires to (10) locations on 3rd floor of B1100 South for CNMOC to support NMCI network as outlined in OAO proposal dated January 18, 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

a. The contractor shall be responsible for performance of the following tasks:

- (1) Install Panduit raceway from conduit that enters each room to jack location.
- (2) Install Panduit outlet box at each jack location.
- (3) Install (1) Cat5e wire to (1) location in rooms 33347I, 33331D and 33331B on the 3rd floor in conduit placed by other contractor.
- (4) Install (1) Cat5e wire to (2) locations in rooms 33316R on the 3rd floor in conduit placed by other contractor.
- (5) Install (1) Cat5e wire to (5) locations in rooms 33321A on the 3rd floor in conduit placed by other contractor.
- (6) Install (1) singlegang faceplate at (10) locations to hold (1) Cat5e jack.
- (7) Terminate each wire on existing patch panel in room 33347A.
- (8) Test and label wiring at both ends.
- (9) Provide OAO with a redline drawing showing jack numbers and locations.

- b. The contractor shall provide the following material:
- (1) 2,000 feet of Belden Data Twist Fiber PVC wire (CM-00424BEL-5U-06)
 - (2) 25 each Panduit LD5 raceway (131156)
 - (3) 20 each Ortronics blank modules (148027)
 - (4) 10 each Ortronics singlegang faceplates (148025)
 - (5) 10 each Panduit outlet boxes (201336)
 - (6) 10 each Ortronics single T568A/B Cat5e jack (248941)
 - (7) 2 packs of Panduit inside corners LD5 (131142)
 - (8) 2 packs of Panduit outside corners LD5 (131137)
 - (9) 2 pack of Panduit right angle LD5 (131138)
 - (10) 1 pack of Panduit TEES LD5 (142138)
- c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (January 28, 2005).

12. SWR P203 5231 05

The contractor shall provide for one System Admin personnel to attend 2005 PatchLink conference and meeting (January 31, 2005 - February 4, 2005) at Scottsdale, AZ as outlined in OAO proposal dated December 10 2004.

- a. The contractor shall be responsible for performance of the following tasks:
- (1) 1 each system administration person to attend PatchLink conference in Scottsdale, AZ for 4 ½ days including travel, hotel, per Diem, shuttle to and from airport and personal car mileage. Conference begins on 01/31/05 and runs thru 02/04/05.
- b. Schedule: The completion of this effort shall be February 5, 2005.

13. SWR P203 5226 02

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), necessary to migrate current NT4.0 domain structure to Windows 2003 Active Directory which includes building at least three SSCMAIN domain controllers and collapsing existing resource domains into organizational units. Additionally the contractor shall migrate Exchange 5.5 to Exchange 2003 and build two external DNS Bind Servers as outlined in OAO proposal dated February 8, 2005.

- a. The contractor shall be responsible for performance of the following tasks:
- (1) Build 2 new external DNS Bind Servers
 - (2) Place external DNS Bind Servers in DMZ
 - (3) Build NT4.0 BDC's needed for active directory migration and recovery
 - (4) Build 1 windows 2003 secondary DNS server
 - (5) Upgrade the SSCMAIN domain to Windows 2003 Active Directory
 - (6) Build 2 additional Windows 2003 Domain Controllers
 - (7) Clean-up user accounts and resources in SSCMAIN domain
 - (8) Build Windows 2003 Exchange Server and migrate mailboxes
 - (9) Collapse existing resource domains and migrate into organizational units in the SSCMAIN domain

- (10) Establish organizational units (OU) for contractors and assign appropriate administrative permissions so the contractors can migrate their domain into the appropriate OU
- b. Schedule: The completion of this effort shall be no later than August 31, 2005 based on the purchase of the equipment by NASA by May 6, 2005.

14. SWR P203 5GEN 00

The contractor shall provide the labor necessary to procure annual support and maintenance for Ctech Logger and EZSave (Genesis software) through November 30, 2007 as outlined in OAO proposal dated December 1, 2004.

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Genesis will provide support and maintenance for 35 months once this Implementation Plan is approved.
 - (2) OAO will send monthly reports to NASA.
 - (3) NASA will provide the reports to the agencies that request them.
- b. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (January 19, 2005).

15. SWR P203 5PBX 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to assist vendor (EADS) in removal, installation and implementation of PointSpan DVD server upgrade and software in B1201 as outlined in OAO proposal dated December 17, 2004. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Shall assist EADS in the removal and installation of equipment.
 - (2) Shall assist EADS in the installation of new software.
 - (3) Shall work with EADS in testing out new DVD server.
- b. The contractor shall provide the following material:
 - (1) 1 each server upgrade, ECS pair, PointSpan W/DVD DISK "R" (885 0009 503)

The materials to be returned for credit in conjunction with the above service are as follows:

- (1) 1 each DAT tape server (500 1500 301)
- c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (February 3, 2005).

16. SWR P203 5SPM 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), necessary to assist Proofpoint vendor in the installation of Proofpoint

appliance into rack in room 106 of B1201 as outlined in OAO proposal dated December 20, 2004.

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Shall assist Proofpoint representative with the configuration of appliance for SSC.
 - (2) Shall prepare quick overview document for end users.
 - (3) Shall provide updated drawing showing the insertion of Proofpoint into the network.
 - (4) Shall manage system until 11/30/05 on this SWR. The NASA will have to issue an new SWR.
 - (5) Shall provide information in the monthly report to NASA along with the information on McAfee Webshields.
 - (6) Shall place cross connects to connect to the network.
 - (7) Shall upgrade prior to 11/30/2005
- b. NASA will provide all equipment for this job
- c. Schedule: The completion of this effort shall be no later than 11 months after receipt of Fast Track approval (January 28, 2005).

17. SWR WM00 5FAA 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install (2) 24-strand multimode fiber cables from A143 to room C156 in B1009 for NRLDET to support computer network as outlined in OAO proposal dated January 20, 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:
 - (1) Install Caddy J-hooks in ceiling to hold fiber cable.
 - (2) Install (2) 24-strand multimode plenum cables from room A143 to room C156.
 - (3) Install (1) Panduit hinged wall bracket on wall in room A143 and (1) in room C156.
 - (4) Install (1) LGX fiber panel in room A143.
 - (5) Install (1) LGX fiber panel in room C156.
 - (6) Install 48 multimode ST couplers in 100ST fiber panels and install in each LGX fiber panel.
 - (7) Terminate 48 fibers into multimode ST connectors in room A143 and C156 and place in LGX panel in both rooms.
 - (8) Test and label fiber at both ends.
 - (9) Provide OAO with redline drawing showing route taken between rooms.
- b. The contractor shall provide the following material:
 - (1) 700 feet of Corning 24-strand multimode MIC plenum fiber cable (370-949-FDDI-24)
 - (3) 96 each cool cure consumables (142172)
 - (4) 96 each P2020C-125 multimode ST connectors (170290)
 - (5) 96 each C2000A-2 multimode ST couplers (088987)
 - (6) 2 each LST1U-72/7 termination shelf (106722)
 - (7) 2 packs of 1000ST fiber panels for LST1U-72/7 shelf (106730)

(8) 2 each Panduit hinged wall bracket (250764)

- c. Schedule: The completion of this effort shall be 6 weeks after receipt of Fast Track approval (January 28, 2005).

18. SWR XK49 5190 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), necessary to remove two spans of aerial copper cable behind B2104 and B2105 to enable crane use for the installation of a new cooling tower as outlined in OAO proposal dated February 4, 2005.

- a. The contractor shall be responsible for performance of the following tasks:
- (1) Remove existing aerial cables for two spans to allow crane to get into where new cooling towers are being built behind B2104 and B2105. This cable hasn't been used in several years.
 - (2) Wrap cable on cable reel and take to redistribution.
- b. Schedule: The completion of this effort shall be 1 week after receipt of Fast Track approval (February 7, 2005).

3. Part II "Contract Administration Data", Item 4, is revised as indicated below to incorporate the increase of \$125,728.42 for these infrastructure upgrades:

Month/Mod	Description	Monthly Total	Actual Total To Date
Feb-05	Ordered Seats and Services	397,617.13	1,184,109.27
Jan-05	Catalog Services	14,203.07	115,125.32
Jan-05	Specialized Services	257.60	907.60
Mod 9	Infrastructure upgrades	125,728.42	185,160.74
	Fast Track Mods Authorized (but not incorporated by Mod)	-	-
	sub-total of ordered services	\$ 537,806.22	\$ 1,485,302.93
Feb-05	Less facility credit	-	-
Jan-05	Less outage credit	-	(604.88)
	Less retainage not earned	-	-
	Total	\$ 537,806.22	\$ 1,484,698.05

4. Payment Schedule: Invoicing and Payment for this modification will be made in accordance with Master Contract NAS5-98144, FAR 52.212-4: Commercial Items (May 1997) (Modified) except for SWR J1R3 7098 01 which has the following payment schedule.
- Payment of \$5,205.43 shall be paid upon receipt of all material and accepted by the DOCOTR.
 - Payment of \$9,375.83 shall be paid after the fiber cabling has been installed, cutover, old fiber removed and verified and accepted by the DOCOTR.
5. Reporting requirements: The contractor shall provide monthly status reports to the SSC DOCOTR, with a copy to the DOCO. These reports shall include, as a minimum, installation progress, and potential problem areas.
6. In consideration of the modification agreed to herein as complete equitable adjustment for the changes set forth, the Contractor hereby releases the Government from any and all liability under this delivery order for further equitable adjustments attributable to such facts or circumstances giving rise to these changes.
7. All other terms and conditions of this Delivery Order remain unchanged and in full force and effect.